

UTAH DIVISION OF OIL AND GAS CONSERVATION

REMARKS: WELL LOG _____ ELECTRIC LOGS _____ FILE X WATER SANDS _____ LOCATION INSPECTED _____ SUB. REPORT/abd. _____8-31-79. Location abandoned, well never drilledDATE FILED 5-3-78

LAND: FEE & PATENTED

STATE LEASE NO.

PUBLIC LEASE NO. U-38359

INDIAN

DRILLING APPROVED: 5-4-78

SPUDED IN:

COMPLETED:

PUT TO PRODUCING:

INITIAL PRODUCTION:

GRAVITY A.P.I.

GOR:

PRODUCING ZONES:

TOTAL DEPTH:

WELL ELEVATION:

DATE ABANDONED: 8-31-79 - Location abandonedFIELD: ~~Cisco Dome~~ 3/46 Greater Cisco

UNIT:

COUNTY: Grand

WELL NO. Cisco-Federal #3

APT. NO: 43-019-30439LOCATION 1980' FT. FROM (N) ~~XX~~ LINE, 680'FT. FROM (E) ~~XX~~ LINE. SE NE $\frac{1}{4}$ - $\frac{1}{4}$ SEC. 108

TWP.

RGE.

SEC.

OPERATOR

TWP.

RGE.

SEC.

OPERATOR:

20S

21E

10

DYCO PETROLEUM CORP.

8-31-79: Location abandoned; well
never drilled.

FILE NOTATIONS

Entered in NID File	....	Checked by Chief	.....
Location Map Pinned	....	Approval Letter	.....
Card Indexed	....	Disapproval Letter	.....

COMPLETION DATA:

Date Well Completed	.....	Location Inspected	.....
GW..... WW..... TA.....		Bond released	
GW..... OS..... PA.....		State or Fee Land	.....

LOGS FILED

Driller's Log.....
Electric Logs (No.)
E..... I..... Dual I Lat..... GR-N..... Micro.....
Sonic GR..... Lat..... MI-L..... Sonic.....

..... Others
..... Lat MI-L Sonic
..... Dual I Lat GR-N Micro
..... Logs (No.)
.....

LOGS FILED

..... PA
..... TA
..... Completed
..... TION DATA:
..... Pinned
..... TO File
..... Checked by Chief
..... Approval Letter
..... Disapproval Letter
..... Location Inspected
..... Bond released
..... State or Fee Land
.....

NOTATIONS

10-4-90 let

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK

DRILL ☒DEEPEN ☐PLUG BACK ☐

b. TYPE OF WELL

OIL
WELL ☒GAS
WELL ☐

OTHER

SINGLE
ZONE ☐MULTIPLE
ZONE ☐

2. NAME OF OPERATOR

DYCO PETROLEUM CORPORATION

3. ADDRESS OF OPERATOR

420 NBT Bldg, 320 S. Boston, Tulsa, Oklahoma 74103

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)*

At surface

1980' FN & 680' FE

At proposed prod. zone

N/A

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*

18.6 N-NW of Cisco, Utah

15. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT.
(Also to nearest drlg. unit line, if any)

680'

16. NO. OF ACRES IN LEASE

120

17. NO. OF ACRES ASSIGNED
TO THIS WELL

40

18. DISTANCE FROM PROPOSED LOCATION*
TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT.

1664' SE

19. PROPOSED DEPTH

3800

20. ROTARY OR CABLE TOOLS

Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)

5454' Ground

22. APPROX. DATE WORK WILL START*

July 20, 1978

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 $\frac{1}{4}$ "	8-5/8"	24#	350	To surface
7-7/8"	4 $\frac{1}{2}$ "	10.5#	3800	Across pay, minimum 250 sks

1. Drill 12 $\frac{1}{4}$ " hole to approx. 350, set 8-5/8" casing, cement to surface.
2. Drill 7-7/8" hole to approx. 3800 to test.
3. Ran 4 $\frac{1}{2}$ " csg if productive.
4. P & A per U. S. G. S. instructions if any.

See attached "Surface Use & Operational Plan" for details

State of Utah, Department of Natural Resources
Division of Oil, Gas, and Mining
1588 West South Temple
Salt Lake City, Utah 84119

NOTICE OF APPROVAL

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

SIGNED

Charles L. Simon

Area Engineer

DATE 4-25-78

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

W.P. Mouton

TITLE

ACTING DISTRICT ENGINEER

DATE

JUL 31 1978

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions On Reverse Side

STATE, OG+M

Dyco Petroleum Corp.
Cisco-Federal #3
Lease U-38359
Sec. 10-T20S-R21E SLM
Grand County, Utah

Supplemental Stipulations:

1. Since the lease falls within an identified deer wintering range, no exploration activity will be conducted between December 1 and March 31 (dates inclusive). This does not affect producing wells, hauling oil, maintenance, etc.
2. The access road will enter the location from the west (from Cisco Federal #2) rather than as marked on exhibit V of the surface use plan.
3. An archaeological clearance is obtained for the access route.
4. Stockpile the surface one foot (1') of topsoil as indicated on exhibit VI of the surface use plan.
5. The operator will submit surface use and restoration plans for any proposed flowline from well #3 to well #2 prior to any construction thereof.
6. If production is obtained the access road will be upgraded to BLM specifications for long term roads as outlined in the enclosed surface use standards from the "Oil and Gas" pamphlet (Joint USGS/BLM publication).
7. Rehabilitation of the pad and access road will be accomplished in accordance with the enclosed restoration procedures.
8. Construction and maintenance for surface use approved under this plan should be in accordance with the surface use standards as set forth in the BLM/GS Oil and Gas Brochure entitled "Surface Operating Standards for Oil and Gas Exploration and Development". This includes, but is not limited to, such items as road construction and maintenance, handling of topsoil, and rehabilitation.

United States Department of the Interior
Geological Survey
8440 Federal Building
Salt Lake City, Utah 84138

Usual Environmental Analysis

Lease No. U-38359Operator Dyco Petroleum Corp.Well No. 3Location 1980 FNL 680' FEL Sec. 10 T. 20S R. 21ECounty Grand State Utah Field Cisco DomeStatus: Surface Ownership Public Minerals PublicJoint Field Inspection Date May 17, 1978

Participants and Organizations:

Rocky CurnuttBLMJohn EvansUSGSJim DesjarlaisOperator

Related Environmental Analyses and References:

- (1) Grand Area Oil & Gas EAR, BLM, Utah
- (2) Book Mountain Unit Resource Analysis, BLM, Utah

Analysis Prepared by:

John T. Evans
Environmental Scientist
Salt Lake City, Utah

Date June 16, 1978

NOTED JOHN T. EVANS JES

6/22/78

STATE, OG+M.

Proposed Action:

On April 23, 1978, Dyco Petroleum Corp. filed an Application for Permit to Drill the No. 3 exploratory well, a 3800 foot oil and gas test of the Dakota, Cedar Mountain, Morrison, and Salt Wash Formations; located at an elevation of 5454 ft. in the SE/4 NE/4 Sec 10 T.20S., R.21E. on Federal mineral lands and Public surface; lease No. U-38359. There was no objection raised to the wellsite. As an objection was raised to the access road, it was changed.

A rotary rig would be used for the drilling. An adequate casing and cementing program is proposed. Fresh-water sands and other mineral-bearing formations would be protected. A Blowout Preventor would be used during the drilling of the well. The proposed pressure rating should be adequate. Details of the operator's NTL-6 10-Point Subsurface and 13-Point Surface Protection Plans are on file in the U.S.G.S. District Office in Salt Lake City, Utah and the U.S.G.S. Northern Rocky Mountain Area Office in Casper, Wyoming.

A working agreement has been reached with the BLM, the controlling surface agency. Rehabilitation plans would be decided upon as the well neared completion; the Surface Management Agency would be consulted for technical expertise on those arrangements.

The operator proposes to construct a drill pad 125 ft. wide x 200 ft. and a reserve pit 50 ft. x 75 ft. A new access road will be constructed 18 ft. wide x 0.3 miles long and from an existing and improved road. The operator proposes to construct production facilities on disturbed area of the proposed drill pad.

If production is established, plans for a flow line will be constructed along access road. The anticipated starting date is July 20, 1978 and duration of drilling activities would be about 25 days. The plan was amended by letter of May 23, 1978.

Location and Natural Setting:

The proposed drillsite is approximately 18.6 miles NNW of Cisco, Utah, the nearest town. A fair road runs to within 0.25 miles of the location. This well is in the Cisco field.

Topography:

The well is on a flat ridge top that slopes to the south to the east.

Geology:

The surface geology is Mancos. The soil is sandy clays and gravels. No geologic hazards are known near the drillsite. Seismic risk for the area is minor. Anticipated geologic tops are filed with the 10-Point Subsurface Protection Plan.

Approval of the proposed action would be conditioned that adequate and sufficient electric, radioactive, density logging surveys would be made to locate and identify any potential mineral resources. Production casing and cementing would be adjusted to assure no influence of the hydrocarbon zones through the well bore on these minerals. In the event the well is abandoned, cement plugs will be placed with drilling fluid in the hole to assure protection of any mineral resources.

The potential for loss of circulation would exist and is possible. Loss of circulation may result in the lowering of the mud levels, which might permit exposed upper formations to blow out or to cause formation to slough and stick to drill pipe. A loss of circulation would result in contamination due to the introduction of drilling muds, mud chemicals, filler materials, and water deep into the permeable zone, fissures, fractures, and caverns within the formation in which fluid loss is occurring. The use of special drilling techniques, drilling muds, and lost circulation materials may be effective in controlling lost circulation.

A geologic review of the proposed action has been furnished by the Area Geologist, U. S. Geological Survey, Salt Lake City, Utah. The

operator's drilling, cementing, casing, and blowout prevention programs have been reviewed by the Geological Survey engineers and determined to be adequate.

Soils:

No detailed soil survey has been made of the project area. The top soils in the area range from a sandy clay to a clay type soil. The soil is subject to runoff from rainfall and has a high runoff potential and sediment production would be high. The soils are mildly to moderately alkaline and support the salt-desert shrub community. The pinion, juniper association is also present.

Top soil would be removed from the surface and stockpiled. The soil would be spread over the surface of disturbed areas when abandoned to aid in rehabilitation of the surface. Rehabilitation is necessary to prevent erosion and encroachment of undesired species on the disturbed areas. The operator proposes to rehabilitate the location and access roads per the recommendations of the Bureau of Land Management.

Approximately two acres of land would be stripped of vegetation. This would increase the erosional potential. Proper construction practice, construction of water bars, reseeding of slope-cut area, would minimize this impact.

Air:

No specific data on air quality is available at the proposed location. There would be a minor increase in air pollution due to emissions from rig and support traffic engines. Particulate matter would increase due to dust from travel over unpaved dirt roads. The potential for increased air pollution due to leaks, spills, and fire would be possible.

Relatively heavy traffic would be anticipated during the drilling-operations phase, increasing dust levels and exhaust pollutants in

the area. If the well was to be completed for production, traffic would be reduced substantially to a maintenance schedule with a corresponding decrease of dust levels and exhaust pollutants to minor levels. If the project results in a dry hole, all operations and impact from vehicular traffic would cease after abandonment. Due to the limited number of service vehicles and limited time span of their operation, the air quality would not be substantially reduced. Toxic or noxious gases would not be anticipated.

Precipitation:

Annual rainfall should range from about 6 to 8" at the proposed location. The majority of the numerous drainages in the surrounding area are of a non-perennial nature flowing only during early spring runoff and during extremely heavy rain storms. This type of storm is rather uncommon as the normal annual precipitation is around 6". Most useful moisture comes in the form of snow.

Winds are medium and gusty, occurring predominately from east to west. Air mass inversions are occasional. The climate is semi-arid with abundant sunshine, hot summers and cold winters with temperature variations on a daily and seasonal basis.

Surface Water Hydrology:

The proposed location drains to Nash Wash. Due to the distance from major drainage patterns, the proposed project should have minor impact on the surface water systems.

Some additional erosion would be expected in the area since surface vegetation would be removed. If erosion became serious, drainage systems such as water bars and dikes would be installed to minimize the problem.

The potentials of pollution would be present from leaks or spills. The operator is required to report and clean-up all spills or leaks.

Ground Water Hydrology:

Some minor pollution of ground water systems would occur with the introduction of drilling fluids (filtrate) into the aquifer. This is normal and unavoidable during rotary drilling operations. The potential for communication, contamination and commingling of formations via the well bore would be possible. The drilling program is designed to prevent this. There is need for more data on hydrologic systems in the area and the drilling of this well may provide some basic information as all shows of fresh water would be reported. Water production with the gas would require disposal of produced water per the requirements of NTL-2B.

The depths of fresh-water formations are listed in the 10-Point Subsurface Protection plan.

There would be no tangible effect on water migration in fresh-water aquifers. The pits would be unlined. If fresh water should be available from the well, the owner or surface agency may request completion as a water well if given approval.

Vegetation:

Plants in the area are of the salt-desert-shrub types grading to the pinon-juniper association.

Proposed action would remove about two acres of vegetation. Removal of vegetation would increase the erosional potential and there would be a minor decrease in the amount of vegetation available for grazing.

The operator proposes to rehabilitate the surface upon completion of operations.

Wildlife:

This is a primary deer winter area. The lease provides special stipulations for operations.

Animal and plant inventory has been made by the BLM. No endangered plants or animals are known to inhabit on the project area. The fauna of the area consists predominately of the mule deer, coyotes, rabbits, and varieties of small ground squirrels and other types of rodents and various types of reptiles. The area is used by man for the primary purpose of grazing domestic livestock and sheep.

The birds of the area are raptors, finches, ground sparrows, magpies, crows, and jays.

Social-Economic Effect:

An on the ground surface archaeological reconnaissance has been conducted of the proposed action. Appropriate clearances have been obtained from the surface managing agency. If a historic artifact, an archaeological feature or site is discovered during construction operations; activity would cease until the extent, the scientific importance, and the method of mitigating the adverse effects could be determined by a qualified cultural resource specialist. Flint chips were observed in the proposed access road. The access road was changed to avoid possible cultural resources and to minimize surface disturbance. The access road will follow proposed flow line route.

There are no occupied dwellings or other facilities of this nature in the general area. Minor distractions from aesthetics would occur over the lifetime of the project and is judged to be minor. All permanent facilities placed on the location would be painted light sand color to blend in with the natural environment. Present use of the area is grazing, recreation, and oil and gas activities.

Noise from the drilling operation may temporarily disturb wildlife and people in the area. Noise levels would be moderately high during drilling and completion operations. Upon completion, noise levels would be infrequent and significantly less. If the area is abandoned, noise levels should return to pre-drilling levels.

The site is not visible from any major roads. After drilling operations, completion equipment would be visible to passersby of the area but would not present a major intrusion.

The economic effect of one well would be difficult to determine. The overall effect of oil and gas drilling and production activity are significant in Grand County. But should this well discover a significant new hydrocarbon source, local, state and possibly national economies might be improved. In this instance, other development wells would be anticipated, with substantially greater environmental and economic impacts.

Should the wellsite be abandoned, surface rehabilitation would be done according to the surface agency's requirements and to USGS's satisfaction. This would involve leveling, contouring, reseeding, etc., of the location and possibly the access road. If the well should produce hydrocarbons, measures would be undertaken to protect wildlife and domestic stock from the production equipment.

=

Land Use:

Land is used for recreation, livestock and wildlife grazing and oil and gas operations. There are no national, state, or local parks, forests, wildlife refuges , grasslands, monuments, trails or other formally designated recreational facilities near the proposed location.

The proposed location is within the Book Mountain Planning Unit (06-01). This Environmental Assessment Record was compiled by the Bureau of Land Management, the surface managing agency of the Federal surface in the area. The study includes additional information on the environmental impact of oil and gas operations in this area and gives land use recommendations. The E.A.R. is on file in the agency's State offices and is incorporated herein by reference.

Waste Disposal:

The mud and reserve pits would contain all fluids used during the drilling operations. A trash pit would be utilized for any solid wastes

generated at the site and would be burned or buried at the completion of the operations. Sewage would be handled according to State sanitary codes. For further information, see the 13-Point Surface Plan.

Alternatives to the Proposed Action:

1. Not approving the proposed permit--the oil and gas lease grants the lessee exclusive right to drill for, mine, extract, remove and dispose of all oil and gas deposits.

Under leasing provisions, the Geological Survey has an obligation to allow mineral development if the environmental consequences are not too severe or irreversible. Upon rehabilitation of the site, the environmental effects of this action would be substantially mitigated, if not totally annulled. Permanent damage to the surface and subsurface would be prevented as much as possible under U.S.G.S. and other controlling agencies supervision with rehabilitation planning reversing almost all effects. Additionally, the growing scarcity of oil and gas should be taken into consideration. Therefore, the alternative of not proceeding with the proposed action at this time is rejected.

2. Minor relocation of the wellsite would not significantly reduce the environmental impact. There are no severe vegetative, animal or archaeological-historical-cultural conflicts at the site. Since only a minor impact on the environment would be expected, the alternative of moving the location is rejected. At abandonment, normal rehabilitation of the area such as contouring, reseeding, etc., would be undertaken with an eventual return to the present status as outlined in the 13-Point Surface Plan. The access road was moved to follow the flow line.

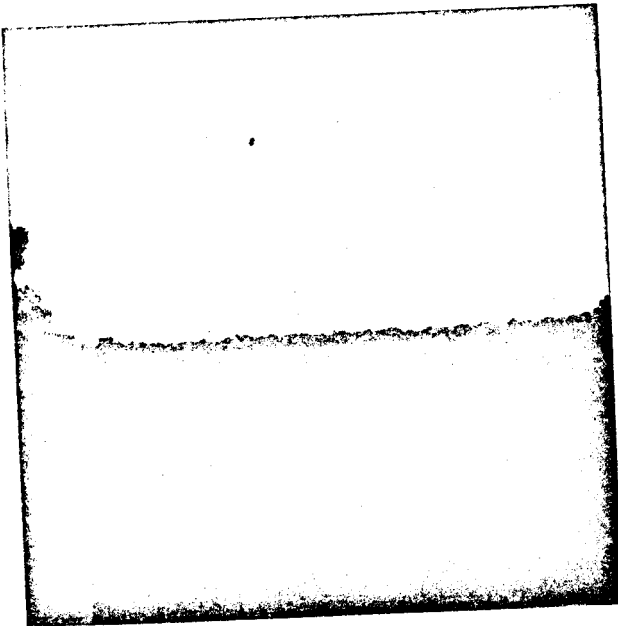
Adverse Environmental Effects Which Cannot Be Avoided:

Surface disturbance and removal of vegetation from approximately two acres of land surface for the lifetime of the project which would result in increased and accelerated erosional potential. Grazing would

be eliminated in the disturbed areas and there would be a minor and temporary disturbance of wildlife and livestock. Minor induced air pollution due to exhaust emissions from rig engines of support traffic engines would occur. Minor increase in dust pollution would occur due to vehicular traffic associated with the operation. If the well is a gas producer, additional surface disturbance would be required to install production pipelines. The potential for fires, leaks, spills of gas, oil or water would exist. During the construction and drilling phases of the project, noise levels would increase. Potential for subsurface damage to fresh water aquifers and other geologic formations exists. Minor distractions from aesthetics during the lifetime of the project would exist. If the well is a producer, an irreplaceable and irretrievable commitment of resources would be made. Erosion from the site would eventually be carried as sediment in the Colorado River. The potential for pollution to the Nash Wash would exist through leaks and spills.

Determination:

This requested action does not constitute a major Federal action significantly affecting the environment in the sense of NEPA, sec. 102(2)(c).



WT Mouton
ACTING District Engineer

U. S. Geological Survey
Conservation Division
Oil and Gas Operations
Salt Lake City District

FROM: District Geologist, Salt Lake City, Utah

TO: District Engineer, Salt Lake City, Utah

Lease No. 4-38359

SUBJECT: APD supplemental stipulations

Operator: Dyco Petroleum Corporation Location:

SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 10 T. 20S, R. 21E

Well: 3

Grand Co., Utah

1. Operator picked tops are adequate? Yes ☒, No ☐. If not: The following are estimated tops of important geologic markers:

Formation

Depth

Formation

Depth

2. Fresh water aquifers likely to be present below surface casing? Yes ☐, No ☒.

If yes: Surface casing program may require adjustment for protection of fresh water aquifers to a depth of approximately _____ feet in the _____

Formation. *Thin lenticular sandstones in the Mancos Shale may contain useable (?) water at depths of less than 500'.*

3. Does operator note all prospectively valuable oil and gas horizons? Yes ☒, No ☐. If not: The following additional horizons will be adequately logged for hydrocarbons:

Unit

Depth

Unit

Depth

4. Any other leasable minerals present? Yes ☐, No ☒. If yes: 1. Logs (_____*) will be run through the _____**

at approximate depths of _____ to _____ feet to adequately locate and identify anticipated _____ beds. 2. Logs (_____*)

will be run through the _____** at approximate depths of _____ to _____ feet to adequately locate and identify anticipated _____

beds. 3. Logs (_____*) will be run through the _____** at approximate depths of _____ to _____ feet to adequately locate and identify anticipated _____ beds.

5. Any potential problems that should be brought to operators attention (e.g. abnormal temperature, pressure, incompetent beds, H₂S)? Yes ☐, No ☒. If yes, what?

6. References and remarks: *Water Report # 83*

* From 10 pt or others as necessary. ** Members, Formations.

Date: 5/18/78

Signed: Candace C. Clark

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK

DRILL ☒DEEPEN ☐PLUG BACK ☐

b. TYPE OF WELL

OIL
WELL ☒GAS
WELL ☐OTHER ☐SINGLE
ZONE ☐MULTIPLE
ZONE ☐

2. NAME OF OPERATOR

DYCO PETROLEUM CORPORATION

3. ADDRESS OF OPERATOR

420 NBT Bldg, 320 S. Boston, Tulsa, Oklahoma 74103

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)*

At surface

1980' FN & 680' FE

At proposed prod. zone

N/A

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*

18.6 N-NW of Cisco, Utah

15. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT.
(Also to nearest drlg. unit line, if any)

680'

16. NO. OF ACRES IN LEASE

120

17. NO. OF ACRES ASSIGNED
TO THIS WELL

40

18. DISTANCE FROM PROPOSED LOCATION*
TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT.

1664' SE

19. PROPOSED DEPTH

3800

20. ROTARY OR CABLE TOOLS

Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)

5454' Ground

22. APPROX. DATE WORK WILL START*

July 20, 1978

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 $\frac{1}{4}$ "	8-5/8"	24#	350	To surface
7-7/8"	4 $\frac{1}{2}$ "	10.5#	3800	Across pay, minimum 250 sks

1. Drill 12 $\frac{1}{4}$ " hole to approx. 350, set 8-5/8" casing, cement to surface.
2. Drill 7-7/8" hole to approx. 3800 to test.
3. Ran 4 $\frac{1}{2}$ " csg if productive.
4. P & A per U.S.G.S. instructions if any.

See attached "Surface Use & Operational Plan" for details

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

SIGNED

Charles L. Simon

Area Engineer

DATE

4-25-78

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions On Reverse Side

DRILLING PLAN

1. SURFACE FORMATION

A. Mancos

2. GEOLOGICAL TOPS

A. Dakota	3100	oil
B. Cedar Mountain	3200	oil or gas
C. Morrison	3300	gas
D. Salt Wash	3500	gas
E. T.D.	3700	

3. DEPTHS OF ANTICIPATED OIL, WATER OR GAS

A. See above

4. CASING PROGRAM

- A. Surface: set 350' 8-5/8" 24# K-55 ST&C new casing & cement to surface with 250 sks Class "G".
- B. Production: set 4 $\frac{1}{2}$ " 10.5# K-55, ST&C @ TD. Cement across pay zones.

5. PRESSURE CONTROL EQUIPMENT

- A. Double ram 10" - 900 Series B.O.P. w/2" kill line, and 2" manifold to pit & mud tanks.
- B. B.O.P. to be tested to 1000 psi prior to drilling out shoe jt, then pipe rams operational tested daily, blind rams to be operational tested on trips. B.O.P. stack & manifold to be visually inspected daily. See Attachment.

6. DRILLING FLUID PROGRAM

- A. 0 - 350 - water, with gel & lime if necessary.
- B. 350 - TD - chemical gel mud to top Dakota: 8.7 - 8.9 wt, 34 - 38 vis, 20 cc water loss. On top Dakota increase vis to 38 - 44, lower water loss to 10 - 15 cc to drill to TD.
Lost circulation material to be on location.

7. AUXILIARY EQUIPMENT

- A. Upper Kelly Cock
- B. Float at bit
- C. Mud system will be visually monitored
- D. Stabbing valve on floor
- E. Hole to be kept full on trips

8. EVALUATION PROGRAM

- A. Cores - None planned
- B. DST - Across Dakota if deemed advisable
- C. Logs - Dual Induction TD - base surface
CNL - Density TD - base surface
Sonic TD - base surface

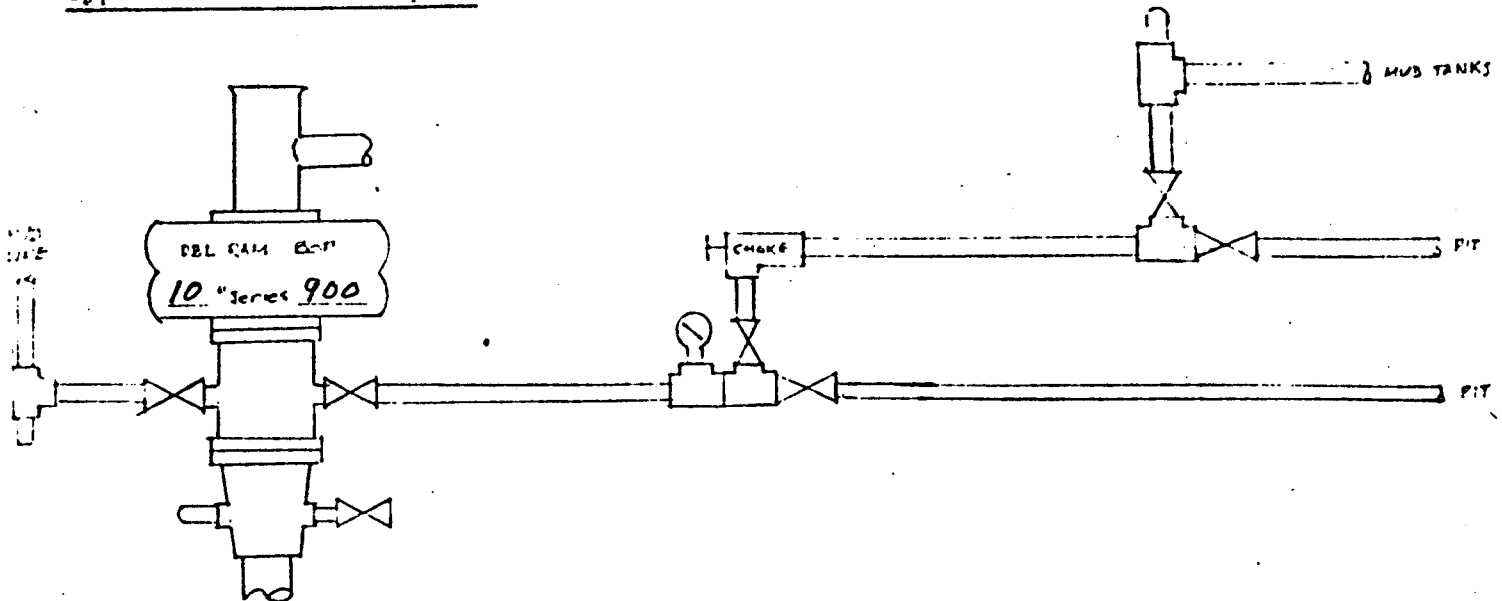
9. HAZARDS

- A. No abnormal pressures or temperatures are anticipated in this area. No H₂S is anticipated. Possible lost circulation if mud weight gets too high, will have lost circulation material on location.

10. DATES

- A. No definite date on rig availability at moment. Estimate will start first part of July. Drilling operation should take about 10 days. If completion rig is available immediately after drilling, 5 days for rig move, location cleanup, and move in completion rig. Completion time estimate at 15 days, additional 15 days to set production equipment.

Typical Minimum BOP Specs



Auxiliary Equipment and Notes

1. All lines and valves to be minimum 2"/3000 psi WP.
2. All bolts to be installed and tight.
3. All crew members to be trained in and familiar with BOP equipment, accumulators, and procedures.
4. Hole to be kept full at all times.
- ~~5. All equipment to be on the floor at all times.~~
6. An inside BOP to be on the floor at all times.
7. An upper kelly-cock to be used at all times.
8. (a) After nipping up, preventers will be pressure tested at 1000 psi for 15 minutes before drilling out.
(b) BOP will be inspected and operated at least daily to insure good working order.
(c) All pressure and operating tests will be recorded on daily drilling report.

EXHIBIT "D"

MULTI-POINT REQUIREMENTS TO ACCOMPANY A. P. D.

1. EXISTING ROADS - a legible map showing:

A. Proposed well site as staked.

See attached survey plat - Exhibit I.

- B. Route and distance from nearest town or locatable reference point to where well access route leaves main road.
The nearest town is Cisco, Utah. From Cisco go southwest along #128 3.6 miles to Windy Mesa Road, thence northwest 11.9 miles to corrals and gate, thence northwest 1.2 miles to junction of roads N & NW, thence right along road N-NW 0.5 mile to junction of roads, thence 1.7 miles N-NW along road to junction right, thence E-SE 500' to proposed new roadway, thence 1000' to location in SE NE Sec. 10 T20S R21E.

C. Access road (s) to location color-coded or labeled.

See Access Road Map - Exhibit II, page 1, 2, & 3.

Red - Oil

Green - Gravel

Yellow - Trail

Orange - New Road

- D. If exploratory well, all existing roads within a 3-mile radius (including type of surface, conditions, etc.)

N/A

- E. If development well, all existing roads within a 1-mile radius of well site.

See Access Road Map - Exhibit II, page 1.

- F. Plans for improvement and/or maintenance of existing roads.

No improvements are anticipated for the existing road. Maintenance will be done as needed for safe traffic to drill site.

2. PLANNED ACCESS ROADS

Map showing all necessary access roads to be constructed or reconstructed, showing: See Exhibit II, page 1, orange road.

- (1) Width: Roads will be 18 feet wide to allow two-way traffic to location.
- (2) Maximum grade: Average grade will be 3%, maximum will not exceed 8%.
- (3) Turnouts: No new turnouts are anticipated on existing roadways, or to location.
- (4) Drainage design: Water bars will be provided on the new road to guarantee drainage off location and to conform to natural drainage.
- (5) Location and size of culverts and brief description of any major cuts and fills:

No culverts or major cuts or fills are anticipated.
- (6) Surfacing materials: Surface materials will be native soil.
- (7) Necessary gates, cattleguards, or fence cuts:

No additional gates, cattleguards, or fence cuts are needed.
- (8) (New or reconstructed roads are to be center-line flagged at time of location staking.)

Proposed new roadway has been center-line flagged and is approximately 1000 feet of new road.

3. LOCATION OF EXISTING WELLS

Two mile radius map if exploratory, or one mile radius map if development well, showing and identifying existing: See Exhibit III

(1) Water wells:

It is believed there is a water well NW SW of Sec. 15 T20S R21E on the Cunningham Ranch as shown on Access Road Map.

(2) Abandoned wells: See Exhibit III

(3) Temporary abandoned wells: See Exhibit III

(4) Disposal wells: None

(5) Drilling wells: None (on April 17, 1978)

(6) Producing wells: See Exhibit III

(7) Shut-in wells; See Exhibit III

(8) Injection wells: None

(9) Monitoring or observation wells for other uses: None

4. LOCATION OF EXISTING AND /OR PROPOSED FACILITIES

A. Within one mile radius of location show the following existing facilities owned or controlled by lessee/operator:

(1) Tank batteries: None

(2) Production facilities: None

EXHIBIT "D" Cont.

(3) Oil gathering lines: None

(4) Gas gathering lines: None

(5) Injection lines: None

(6) Disposal lines: None

B. If new facilities are contemplated, in the event of production show:

(1) Proposed location and attendant lines by flagging if off of well pad:

All facilities will be on location site and all flow lines will be buried. See Exhibit IV.

Or Alternative: If well No. 2 located is productive tank battery will be located on that drill pad and flow line run to it as noted in Exhibit IV.

(2) Dimensions of facilities:

Rig pad will be 200 feet by 125 feet - Reserve pit 50' x 75' x 50' - Production sump will be approx. 40' x 40' fenced.

(3) Construction methods and materials:

All construction materials for drilling site will be from on site. No additional materials are anticipated from off site sources.

(4) Protective measures and devices to protect livestock and wildlife:

Reserve pit will be fence on three sides while drilling, and will be fenced on fourth side when rig moves out. If any oil is on pit it will be flagged to keep out waterfowl.

- C. Plan for rehabilitation of disturbed areas no longer needed for operations after construction completed:

See Item No. 10

5. LOCATION AND TYPE OF WATER SUPPLY

- A. Show location and type of water supply either on map or by written description:
The tentative water source is the Cunningham Ranch. A firm commitment for water has not been negotiated. This will be furnished at a later date.
- B. State method of transporting water, and show any roads or pipelines needed:
Water will be hauled in by truck - See Exhibit V for tentative route.
- C. If water well is to be drilled on lease, so state. (No A.P.D. for water well necessary, however, unless it will penetrate potential hydrocarbon horizons.)
No water well will be drilled.

6. SOURCE OF CONSTRUCTION METHODS

- A. Construction of drilling pad and road will be built from dirt in place.
In the event of production, surfacing materials will be purchased from a commercial vendor in the area.

7. METHODS FOR HANDLING WASTE DISPOSAL

Describe methods and location of proposed containment and disposal of waste material, including:

- (1) Cuttings: to be contained in reserve pit.

- (2) Drilling fluids: to be contained in reserve pit.
- (3) Produced fluids (oil, water): produced oil will be contained in a test tank. Water will be drained into reserve pit during completion. Disposal of produced water will depend on amount of water produced, and salinity of water as set forth in NTL-2B.
- (4) Sewage: in sanitary pit as provided for toilet.
- (5) Garbage and other waste material (trash pits should be fenced with small mesh wire to prevent wind scattering trash before being burned or buried.)

In burn pit, fenced with chicken wire to prevent spreading by wind.

- (6) Statement regarding proper cleanup of well site area when rig moves out:

The location will be kept free of trash and debris during drilling and completion operations. All material will be hauled away or burned.

8. ANCILLARY FACILITIES

Identify all proposed camps and airstrips on a map as to their location, area required, and construction methods. (Camp center and airstrip center lines to be staked on the ground.)

None

9. WELL SITE LAYOUT

A plat (not less than 1" = 50') showing:

- (1) Cross section of drill pad with cuts and fills:

See attached drawing -- see Exhibit VI

- (2) Location of mud tanks, reserve, burn and trash pits, pipe racks, living facilities, and soil material stockpiles:

See Attachments VI & VII

- (3) Rig orientation, parking areas, and access roads:

See Attachment VII

- (4) Statement as to whether pits are to be lined or unlined:
(Approval as used in this section means field approval of location. All necessary staking facilities may be done at time of field inspection. A registered surveyor is not mandatory for such operations.)

Pits will be unlined.

10. PLANS FOR RESTORATION OF SURFACE

State restoration program upon completion of operations, including:

- (1) Backfilling, leveling, contouring, and waste disposal; segregation of spoils materials as needed:

Drill site will be backfilled and leveled as soon as possible after the drilling and completion rigs are moved out. All unused areas will be restored. Waste material will be buried.

- (2) Revegetation and rehabilitation - including access roads (normally per BLM recommendations)

Top soil will be spread over unused areas, and reseeded per U. S. G. S specs.

- (3) Prior to rig release, pits will be fenced and so maintained until cleanup:

Reserve pit will be fenced on three sides during drillings and fourth side fenced until pit is backfilled.

- (4) If oil on pit, remove oil or install overhead flagging:

If any oil is on pit, pit will be flagged.

- (5) Timetable for commencement and completion of rehabilitation operations:

Rehabilitation will commence as soon as possible. If wells are drilled during summer months, all efforts will be made to clean up and reseed prior to winter.

11. OTHER INFORMATION

General description of:

- (1) Topography; soil characteristics, geologic features, flora and fauna: Site is gentle slope to south. Soil is sandy loam. No distinguishing geological features exist. The site vegetation is sagebrush, grass and a few cedar trees. There is evidence of deer and rabbits.
- (2) Other surface-use activities and surface ownership of all involved lands:
The current surface uses are grazing and oil and gas field.
- (3) Proximity of water, occupied dwellings, archeological, historical, or cultural sites:
Running water is in Nash Wash above Cunningham Ranch and they use all water for irrigation of hay fields. There are also several intermittent streams in the area. The only occupied dwellings are at the Cunningham Ranch $1\frac{1}{2}$ miles S-SW of the site. No historical, archeological or cultural sites were observed.

See attached archeological clearance.

12. LESSEE'S OR OPERATOR'S REPRESENTATIVE

Include the name, address, and phone number of the lessee's or operator's field representative who is responsible for assuring compliance with the approved surface use and operations plan.

(1) Mr. Roy Reeves
420 NBT Bldg.
320 S. Boston
Tulsa, Oklahoma 74103

Office: 918-587-2181
Home: 918-743-8630

(2) Mr. Charles Simons
420 NBT Bldg.
320 S. Boston
Tulsa, Oklahoma 74103

Office: 918-587-2181
Home: 918-371-5819

(3) Mr. John Pulley
Flint Engineering & Construction Co.
324 Petroleum Bldg.
Billings, Montana 59101

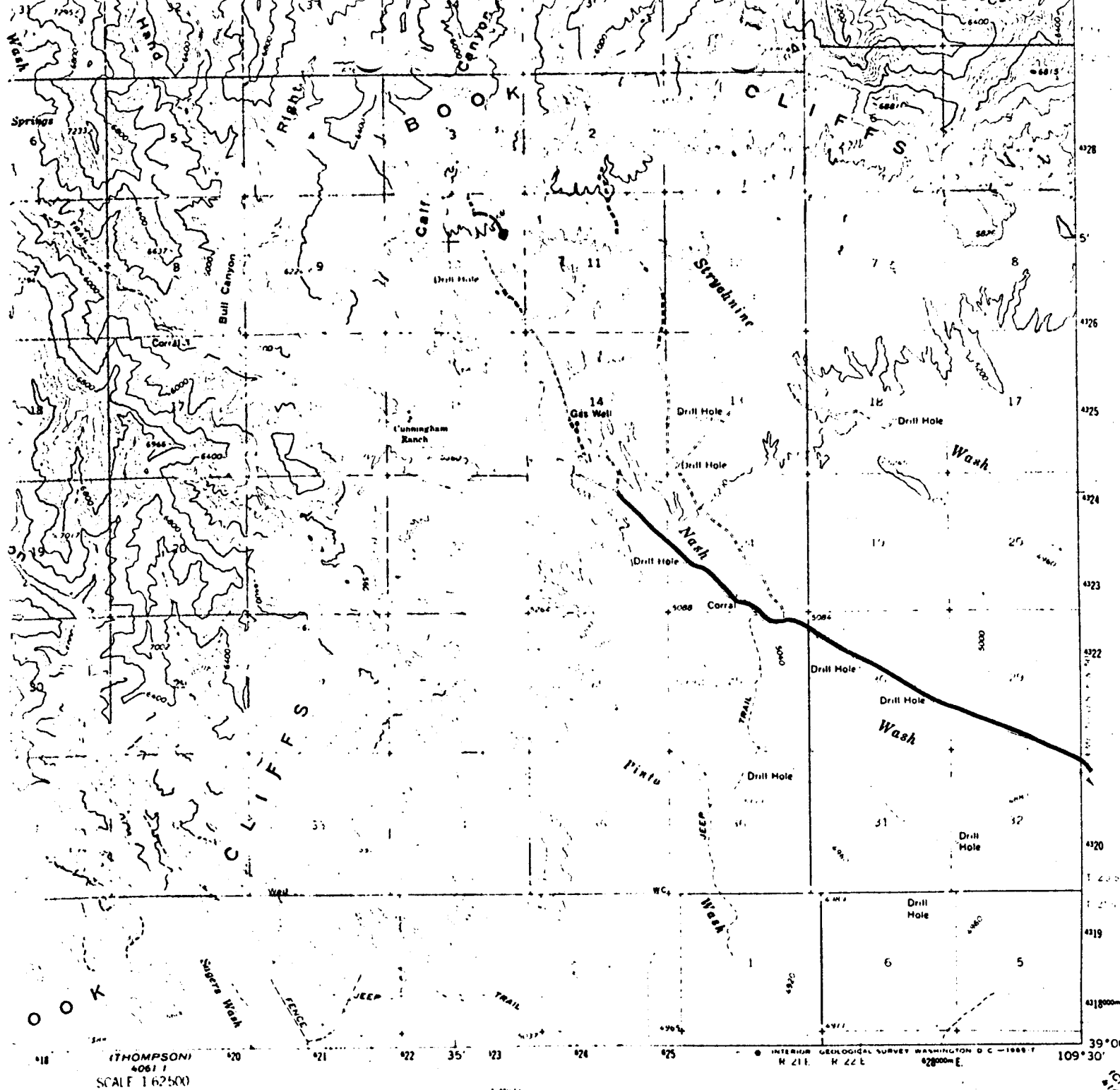
Office: 406-245-4179
Home: 406-259-6156

13. CERTIFICATION

I hereby certify that I, or persons under my direct supervision have inspected the proposed drill site and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by Dyco Petroleum Corporation and its contractors and sub-contractors in conformity with this plan and the terms and conditions under which it is approved.

April 25, 1978
DATE


DYCO PETROLEUM CORPORATION

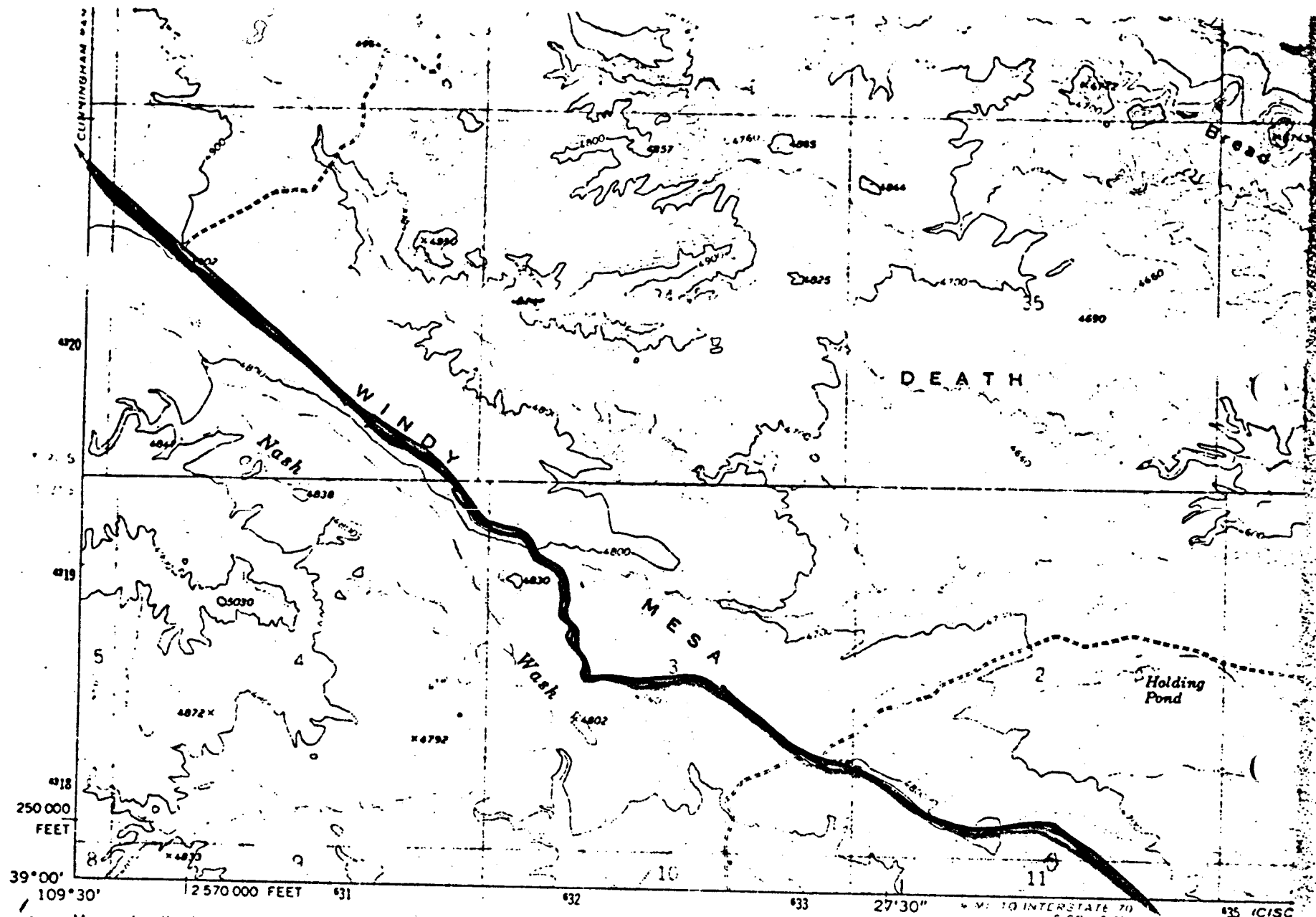


SEGO CANYON, UTAH
N3900—W10930/15

1963

AMS 4062 II—SERIES V797

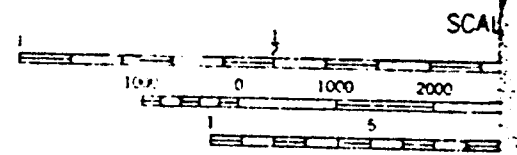
Exhibit II
Page 1



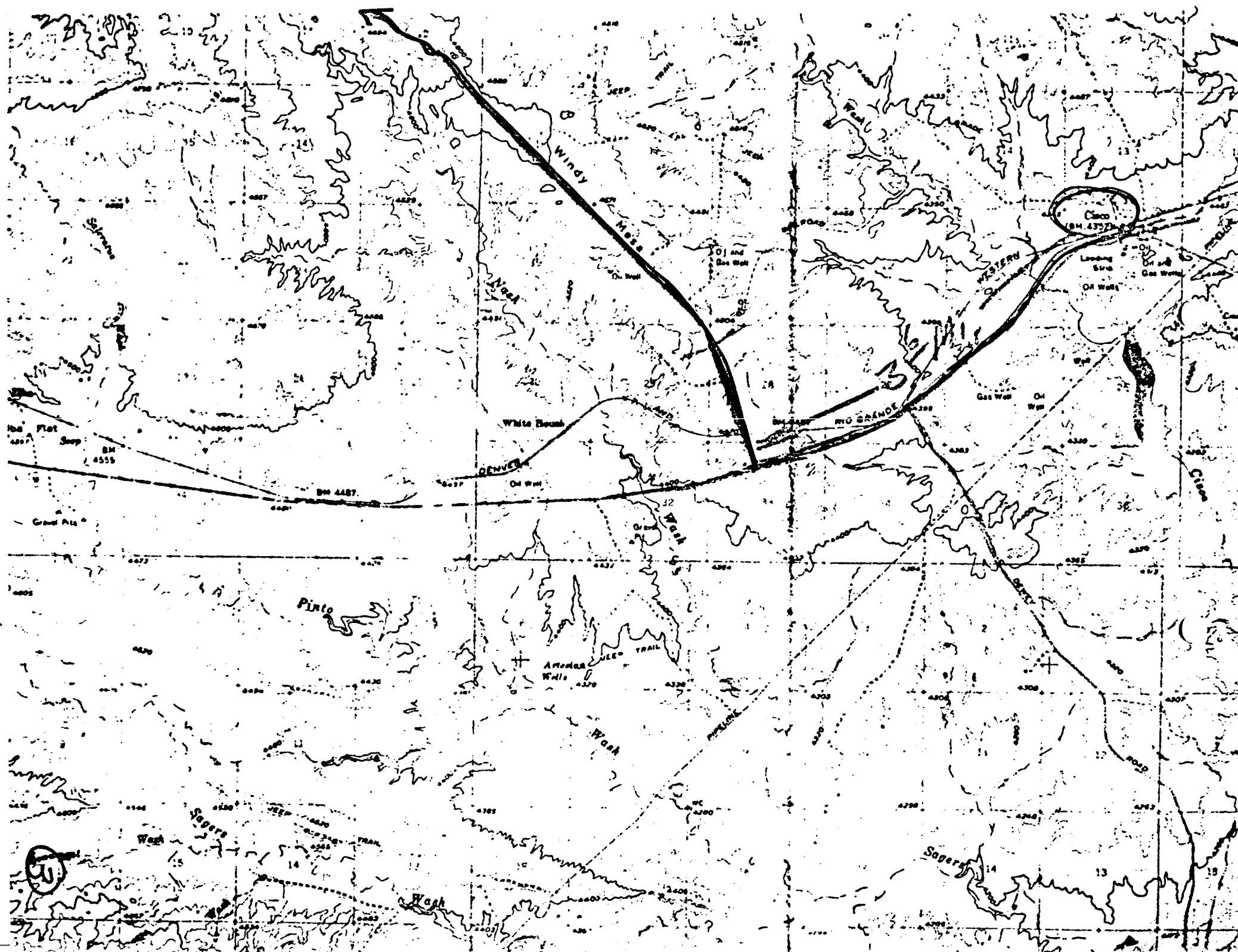
Mapped, edited, and published by the Geological Survey
 Control by USGS and USC&GS
 Topography by photogrammetric methods from aerial
 photographs taken 1969. Field checked 1970
 Polyconic projection. 1927 North American datum
 10,000-foot grid based on Utah coordinate system, central zone
 1000-meter Universal Transverse Mercator grid ticks,
 zone 12, shown in blue
 Fine red dashed lines indicate selected fence lines

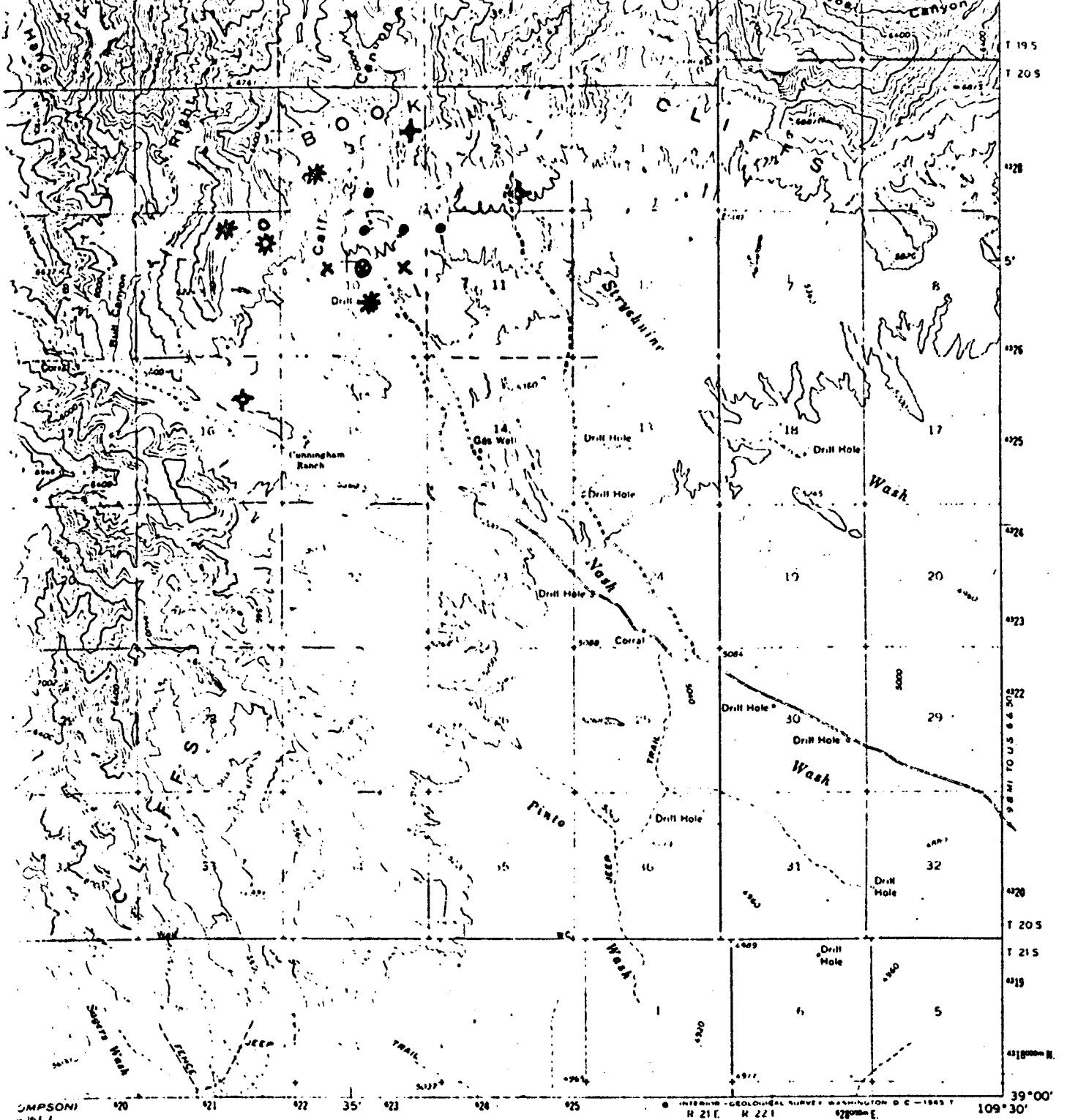
UTM GRID AND 1970 MAGNETIC NORTH
 DECLINATION AT CENTER OF SHEET

THOMPSON 1:62,500
 4061



CONTOUR IN
 DATUM IS F



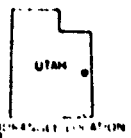


COMPSONI
1:62,500

VERTICAL 80 FEET
HORIZONTAL 40 FEET
CONTOURS
1:62,500

NATIONAL MAP ACCURACY STANDARDS
FOR 25, COLORADO OR WASHINGTON 25, D. C.
AND SYMBOLS IS AVAILABLE ON REQUEST

- Location
- oil well
- * Gas well
- * Abandoned Gas well
- ✕ dry hole
- x Dyco Locations.
- ⊙ Location noted in Application.



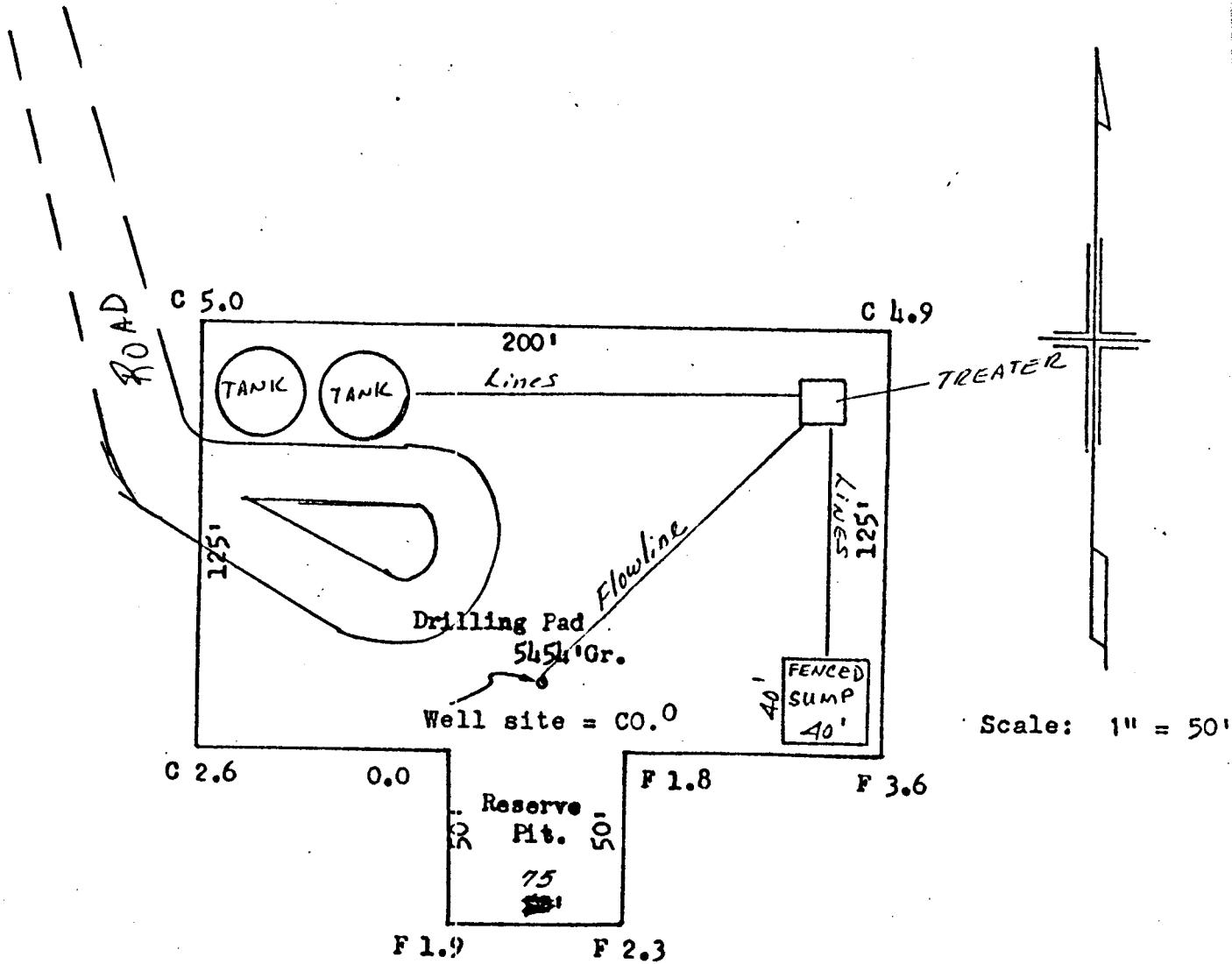
ROAD CLASSIFICATION
Light duty
Unimproved dirt
○ State Route

SEGO CANYON, UTAH
N3900—W10930/15

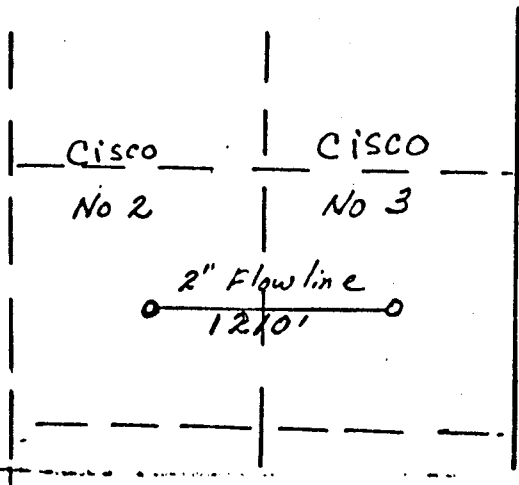
1963
AMS 4062 II—SERIES V797

Exhibit III

Dyco Petroleum Corp.
 #3 Cisco
 1980'FN & 680'FB 10-20S-21E
 Grand County, Utah. 3.

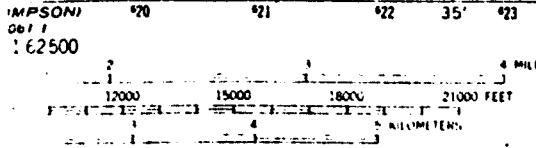
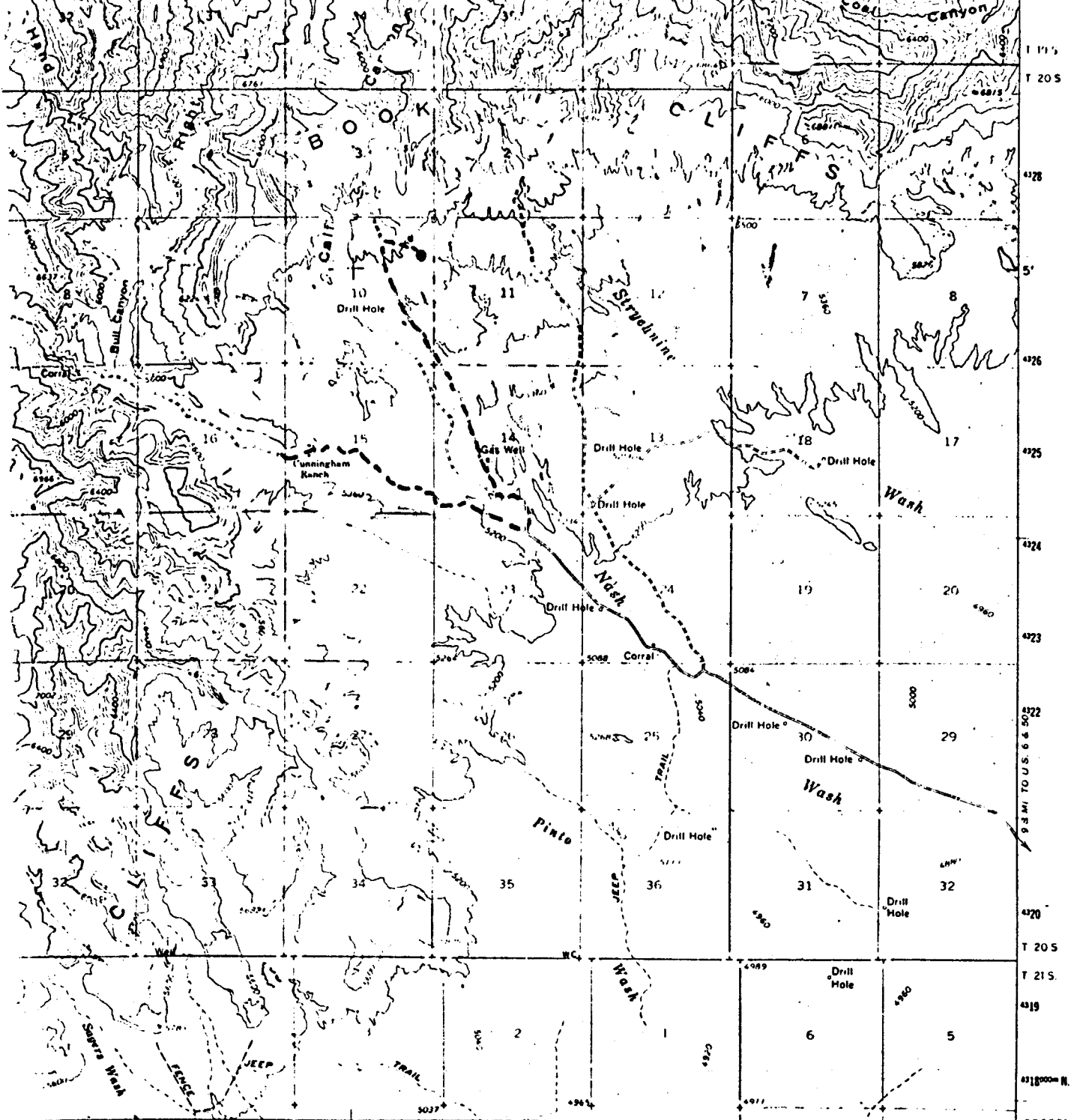


NOTE: ON ALTERNATIVE II, PRODUCTION FACILITIES WILL BE LAID ON CISCO NO 2 SAME AS ABOVE AND FLOWLINE WILL BE LAID FROM NO 3 TO NO 2 AS follow



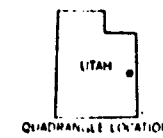
by *Leonard Chasman*
 Powers Elevation Company, Inc.

Exhibit IV



VERTICAL SCALE
1 INCH = 40 FEET
HORIZONTAL SCALE
1 INCH = 1 MILE

NATIONAL MAP ACCURACY STANDARDS
FOR 25, COLORADO OR WASHINGTON 25, D. C.
AND SYMBOLS IS AVAILABLE ON REQUEST



QUADRANGLE LOCATION

INTERIOR GEOLOGICAL SURVEY WASHINGTON D. C. - 1965
R 21 E R 22 E 6280000 E

ROAD CLASSIFICATION

- Light duty
- Unimproved dirt
- () State Route

SECO CANYON, UTAH N3900-W10930/15

1963

AMS 4062 II-SERIES V797

Exhibit IV

N

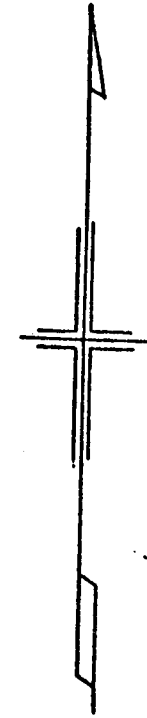
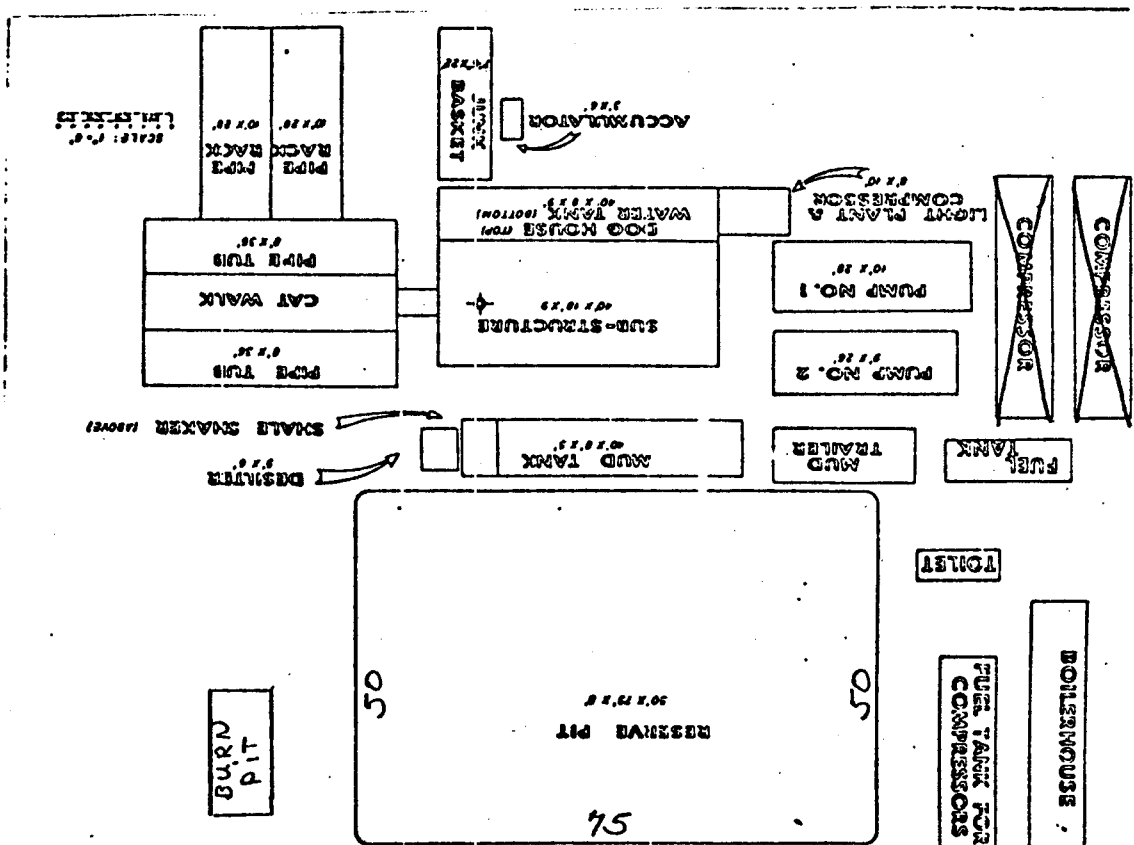


Exhibit VII

200'

PARKING FOR TRAILERS & CARS

200'



200'

VII

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
Moab District Office

Summary Report of
Inspection for Cultural Resources

BLM Use Only: Use Initials.
Case File No.

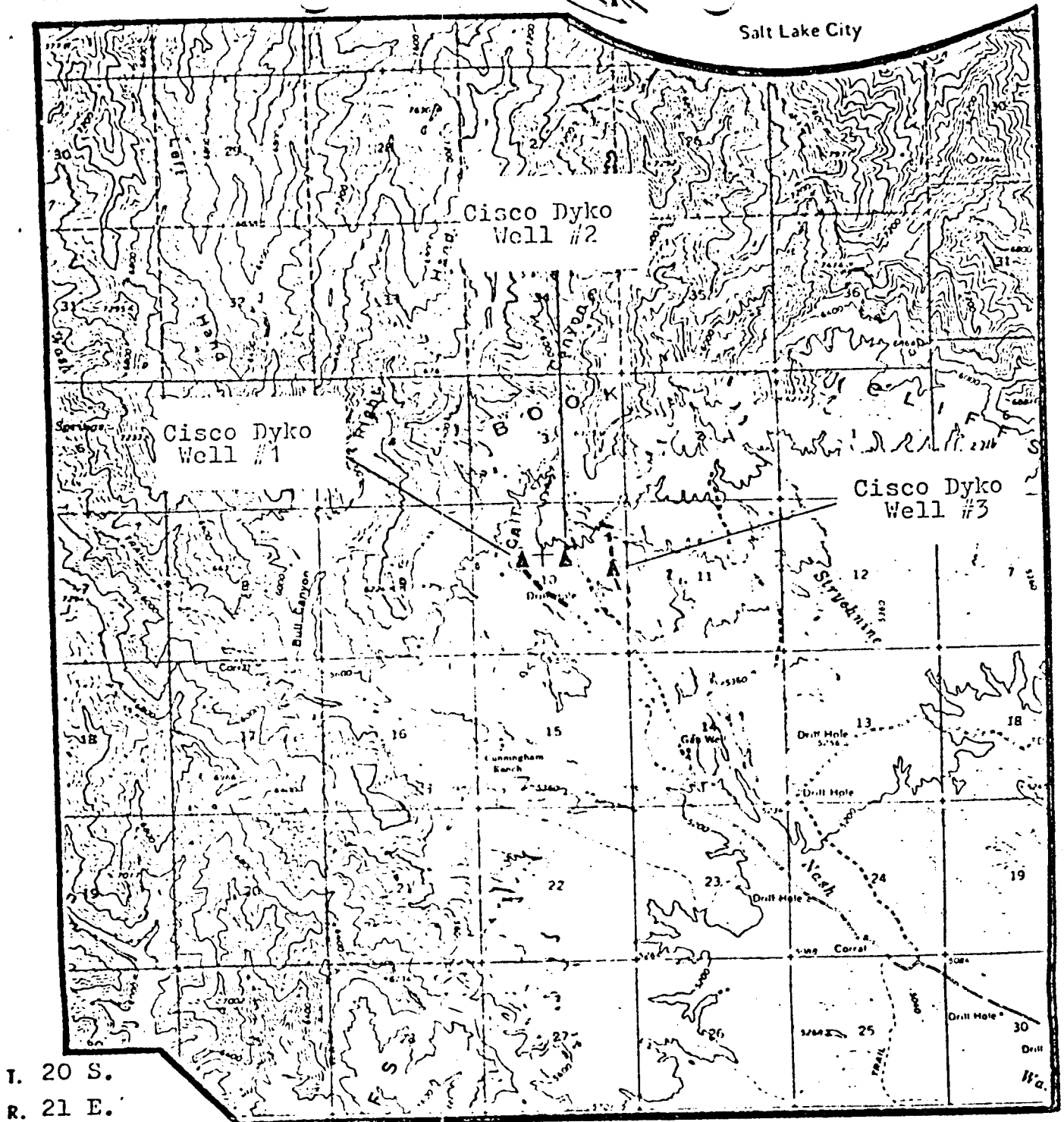
Report Acceptable Yes ___ No ___

Mitigation Acceptable Yes ___

Comments: _____

1. Project Name, Developer
Powers Elevate Company for Cisco Dyco Petroleum Company (Cisco Dyco Wells #1, 2, and 3) (PEC-78-1)
2. Legal Description of Project Area (Attach Map Also)
Township 20 South, Range 21 East, Section 10
3. Institution Holding Antiquities
NA (no antiquities collected)
4. Antiquities Permit No.
78-Ut-014 (M-9)
5. Dates of Field Work
3-23-78
6. Description of Examination Procedures
Ten meter wide transects were walked across the drill locations which averaged ca. 75 meters by 75 meters, and along the three access routes in a search for cultural remains and indications of both pre-historic and historic occupations.
7. Description of Findings (Attach forms or detailed report, if appropriate)
No cultural resources were observed during the survey.
8. Actual/Potential National Register Properties Affected
No national register properties will be adversely affected by the drilling project.
9. Conclusions/Recommendations 1. All vehicle traffic, personnel movement and construction be confined to the locations examined and to access roads leading into the locations; 2. all personnel refrain from collecting individual artifacts or from disturbing any cultural resources in the area and 3. a qualified archeologist be consulted should cultural remains from subsurface deposits be exposed during construction work or if the need arises to relocate or otherwise alter the drill pad location.
10. Signature of Person in Direct Charge of Field Work
I. R. Hark
11. Signature of Title of Institutional Officer Responsible
I. R. Hark

Salt Lake City



I. 20 S.

R. 21 E.

Meridian: Salt Lake B & M

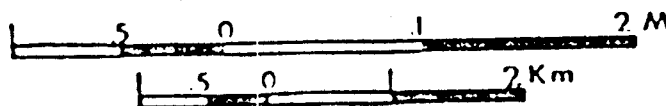
Quad:

Sego Canyon
15' Series

Project: PEC-78-1
Series: East Central
Utah
Date: 3-28-78

Proposed Oil Well Sites in
the Nash Wash Locality of
Grand County, Utah

Legend: Drill Pad ▲
Proposed road ----



Scale

FIGURE

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL & GAS

5. Lease Designation and Serial No.

U-38359

6. If Indian, Allottee or Tribe Name

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work

DRILL ☒DEEPEN ☐PLUG BACK ☐

7. Unit Agreement Name

b. Type of Well

Oil Well ☒Gas Well ☐Other ☐Single Zone ☐Multiple Zone ☐

8. Farm or Lease Name

Cisco - Federal

2. Name of Operator

DYCO PETROLEUM CORPORATION

9. Well No.

3

3. Address of Operator

420 NBT Bldg, 320 S. Boston, Tulsa, Oklahoma 74103

10. Field and Pool, or Wildcat

CISCO DOME

4. Location of Well (Report location clearly and in accordance with any State requirements.)*

At surface

1980' FN & 680' FE SE NE

11. Sec., T., R., M., or Blk.

Sec 10-T20S-R21E

At proposed prod. zone

N/A

12. County or Parrish 13. State

Grand

Utah

14. Distance in miles and direction from nearest town or post office*

18.6 N-NW of Cisco, Utah

15. Distance from proposed*

location to nearest property or lease line, ft. (Also to nearest drlg. line, if any)

680'

16. No. of acres in lease

120

17. No. of acres assigned to this well

40

18. Distance from proposed location* to nearest well, drilling, completed, or applied for, on this lease, ft.

1664' SE

19. Proposed depth

3800

20. Rotary or cable tools

Rotary

21. Elevations (Show whether DF, RT, GR, etc.)

5454' Ground

22. Approx. date work will start*

July 20, 1978

23.

PROPOSED CASING AND CEMENTING PROGRAM

Size of Hole	Size of Casing	Weight per Foot	Setting Depth	Quantity of Cement
12 $\frac{1}{4}$ "	8-5/8"	24#	350	To Surface
7-7/8"	4 $\frac{1}{2}$ "	10.5#	3800	Across pay, minimum 250

sks

This well is on Federal lease, see attached plans for drilling and completing.



IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

Signed

Charles L. Simon

Title

Area Engineer

Date

4-26-78

(This space for Federal or State office use)

Permit No.

43-019-30439

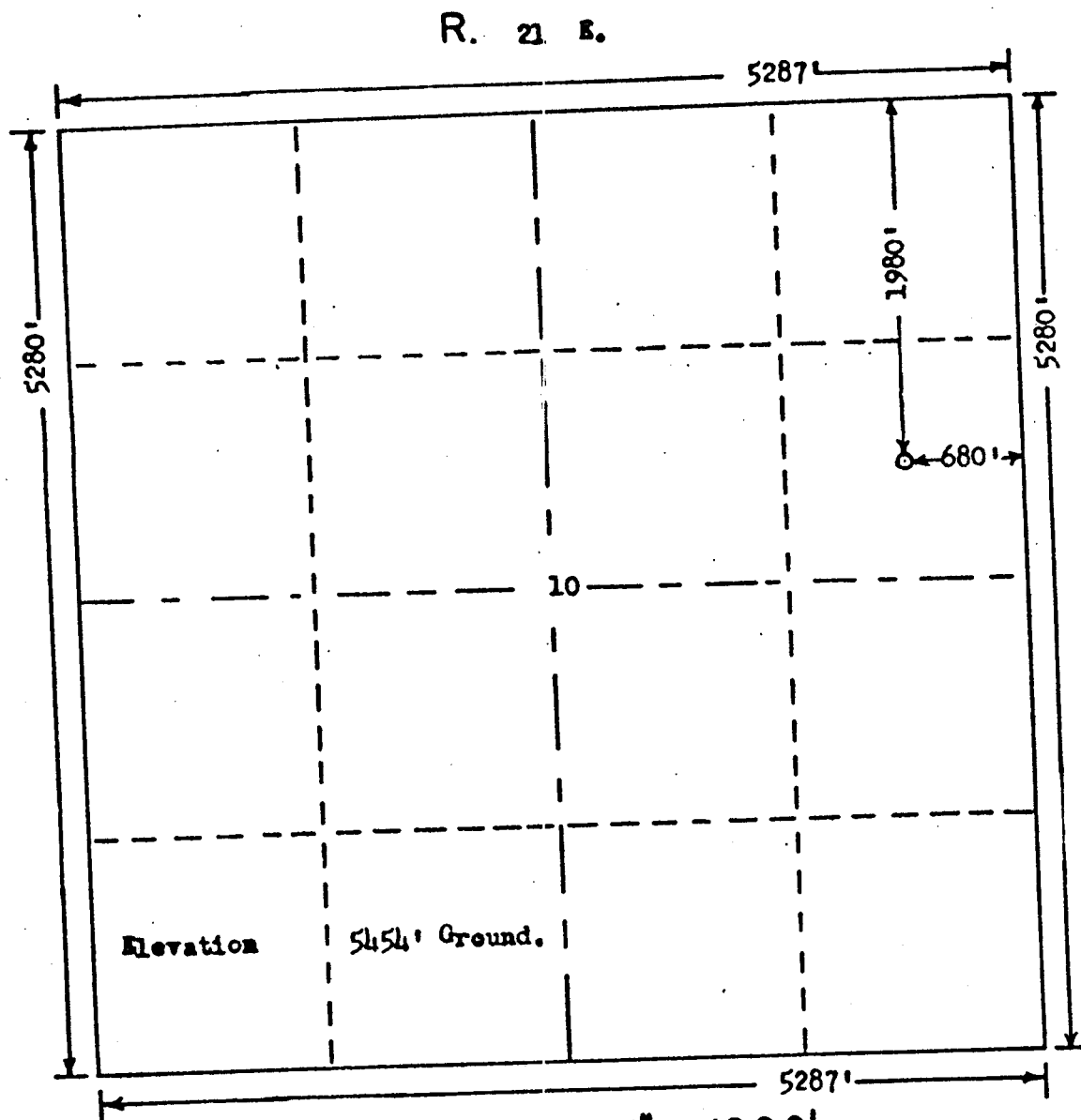
Approval Date

Approved by

Title

Date

Conditions of approval, if any:



T.
20
S.

Powers Elevation Company, Inc. of Denver, Colorado
has in accordance with a request from Jackie
for Dyce Petroleum Corporation
determined the location of #3 Cisco
to be 1980' FN & 680' FE Section 10 Township 20 S.
Range 21 E. of the Salt Lake Principal Meridian
Grand County, Utah

I hereby certify that this plat is an
accurate representation of a correct
survey showing the location of
#3 Cisco

Date: 3-15-78

T. W. W. W.
Licensed Land Surveyor No. 2711
State of Utah

Exhibit I

STATE OF UTAH
DIVISION OF OIL, GAS AND MINING

** FILE NOTATIONS **

Date:

May 3, 1978

Operator:

Dyco Petroleum Inc.

Well No:

C.F. Federal # 3

Location:

Sec. 10 T. 20S R. 21E County: Grand

File Prepared:

/

Entered on N.I.D.:

/

Card Indexed:

/

Completion Sheet:

/

API NUMBER:

43-019-30439

CHECKED BY:

Administrative Assistant

Remarks:

Petroleum Engineer

Remarks:

Director

Remarks:

INCLUDE WITHIN APPROVAL LETTER:

Bond Required:

/

Survey Plat Required:

/

Order No.

102-12

Surface Casing Change
to

/

Rule C-3(c), Topographic exception/company owns or controls acreage
within a 660' radius of proposed site /

O.K. Rule C-3

/

O.K. In

Unit

/

Other:

Letter Written/Approved

May 4, 1978

Dyco Petroleum Corporation
420 NBT Building
320 S. Boston
Tulsa, Oklahoma 74103

Re: Well No. Cisco Federal #1,
Sec. 10, T. 20 S, R. 21 E,
Well No. Cisco Federal #2,
Sec. 10, T. 20 S, R. 21 E,
Well No. Cisco Federal #3, ✓
Sec. 10, T. 20 S, R. 21 E,
Grand County, Utah

Gentlemen:

Insofar as this office is concerned, approval to drill the above referred to well is hereby granted in accordance with the Order issued in Cause No. 102-12.

Should you determine that it will be necessary to plug and abandon this well, you are hereby requested to immediately notify the following:

PATRICK L. DRISCOLL - Chief Petroleum Engineer
HOME: 582-7247
OFFICE: 533-5771

Enclosed please find Form OGC-8-X, which is to be completed whether or not water sands (aquifers) are encountered during drilling.

Further, it is requested that this Division be notified within 24 hours after drilling operations commence, and that the drilling contractor and rig number be identified.

The API number assigned to this well is: #1: 43-019-30437;
#2: 43-019-30438; #3: 43-019-30439.

Very truly yours,

CLEON B. FEIGHT
Director

Conservation Division
2000 Administration Building
1745 West 1700 South
Salt Lake City, Utah 84104

August 21, 1980

Dyco Petroleum Corp.
3 Park Central Suite 445
1515 Arapahoe St.
Denver, Colorado 80202

Re: Returned Application for
Permit to Drill
Well #3
Section 10, T. 20S., R. 21E.
Grand County, UT
Lease #U-38359
Application Approved: July 31, 1978

Well #1
Section 10, T. 20S., R. 21E.
Grand County, UT
Lease #U-38359
Application Approved: July 31, 1978

Gentlemen

The Applications for Permit to Drill the referenced wells were approved. Since that date no known activity has transpired at the approved locations. Under current District policy, Application's for Permit to Drill are effective for a period of one year. In view of the foregoing this office is rescinding the approval of the referenced applications without prejudice. If you intend to drill at these locations on a future date a new Application for Permit to Drill must be submitted.

This office requires a letter confirming that no surface disturbance has been made for these drill sites. Any surface disturbance associated with the approved locations of these wells is to be rehabilitated. A schedule for this rehabilitation must, then, be submitted. Your cooperation in this matter is appreciated.

Sincerely

(P/G SGD.) W. P. MARTENS

for
E.W. Guynn
District Engineer

bcc: O&G NRMA Casper
SMA
State Office (O&G) ✓
State Office (BLM)
USGS-Vernal
Well File
APD Control

Dyco Petroleum Corporation



420 NBT BUILDING
320 SOUTH BOSTON
TULSA, OKLAHOMA 74103
AREA 918/587-2181

August 31, 1979

State of Utah
Department of Natural Resources
Division of Oil, Gas and Mining
1588 West North Temple
Salt Lake City, Utah 84116

Re: Well No. Cisco Federal #1
Sec. 10, T. 20S, R. 21E,
Grand County, Utah

Well No. Cisco Federal #3 L.A.
Sec. 10, T. 20S, R. 21E,
Grand County, Utah

Gentlemen:

Dyco Petroleum Corporation does not intend to drill the
above referenced wells.

If there are any further questions, please advise.

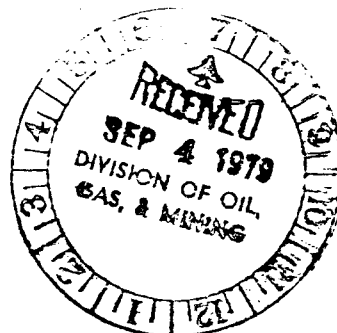
Very truly yours,

DYCO PETROLEUM CORPORATION

Bob Zumwalt
Production Engineer

sew

cc: J. West
D. Holly



PJA

SUBMIT IN PLICATE
(Other instructions on
reverse side)Form approved
Budget Bureau No. 42 R1425UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK

DRILL ☒DEEPEN ☐PLUG BACK ☐

b. TYPE OF WELL

OIL
WELL ☒GAS
WELL ☒

OTHER

SINGLE
ZONE ☐MULTIPLE
ZONE ☒

2. NAME OF OPERATOR

DYCO PETROLEUM CORP.

3. ADDRESS OF OPERATOR

One Park Central - Suite 210, 1515 Arapahoe, Denver, CO 80202

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)*

At surface

NW $\frac{1}{4}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$ of Section 10, T20S, R21E

At proposed prod. zone

1896'

1991' 1961' FNL & 1844' FWL of Section 10

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*

19.3 miles Northwesterly of Cisco, Utah

15. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST

PROPERTY OR LEASE LINE, FT.

(Also to nearest drlg. unit line, if any)

522'

16. NO. OF ACRES IN LEASE

120

17. NO. OF ACRES ASSIGNED

TO THIS WELL

80

18. DISTANCE FROM PROPOSED LOCATION*

TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT.

N/A

19. PROPOSED DEPTH

3520' \pm

20. ROTARY OR CABLE TOOLS

rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)

GR 5521'

22. APPROX. DATE WORK WILL START*

as soon as permitted

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	8 5/8"	24#	200'	circulate cement to surface
6 3/4"	4 1/2"	10.5#	3520'	150 sx cement thru pay zones to 200' above Dakota Formation

Casing and cementing programs will be adjusted to protect coal resource and fresh water aquifers. A flare will be maintained at the end of the Blewie line at all times while drilling below 1500' to insure no gas will be missed.

EXHIBITS ATTACHED:

- "A" Location and Elevation Plat "A₁" Staking Request (PER) approval letter - BLM
"B" Ten-Point Compliance Program
"C" Blowout Preventer Diagram
"D" Multi-Point Requirements for APD
"E" Route & Distance Road Map
"F" Access Road and Radius Map of Wells in Area
"G" Drill Pad Layout with Contours "G₁" Cross-Section of Pad
"H" Drill Rig Layout
"I" Production Facility Layout
"J" Rehabilitation Plan
"K" Map of pipelines in the area and proposed route to wells

RECEIVED
JUL 28 1981DIVISION OF
OIL, GAS & MINING

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

SIGNED

Gary Nollen

TITLE

ENGINEER

DATE

5-14-81

(This space for Federal or State office use)

PERMIT NO.

WT Martin

APPROVAL DATE

FOR

E. W. GUYNN
DISTRICT ENGINEER

TITLE

DATE

JUL 24 1981

APPROVED BY

CONDITIONS OF APPROVAL, IF ANY:

CONDITIONS OF APPROVAL ATTACHED
TO OPERATOR'S COPY
See Instructions On Reverse SideFLARING OR VENTING OF
GAS IS SUBJECT TO NTL 4-A
DATED 1/1/80

NOTICE OF APPROVAL

Date of 20

United States Department of the Interior
Geological Survey
Oil and Gas Operations
2000 Administration Building
1745 West 1700 South
Salt Lake City, Utah 84104

NEPA CATEGORICAL EXCLUSION REVIEW

PROJECT IDENTIFICATION

Operator/Project Name Dyco Cisco Federal #3
Project Type Development Oil and Gas Test
Project Location 1991' FNL, 1896' FWL, Sec. 10, T20S, R21E, Grand Co., Utah
Date Project Submitted May 29, 1981

FIELD INSPECTIONDate June 17, 1981Field Inspection
ParticipantsJ. N. Burkhalter - Dyco representativeLeonard Lewis - Galley ConstructionElmer Duncan, Kevin Cleary - BLMGlenn Doyle - USGS

I have reviewed the proposal in accordance with the categorical exclusion review guidelines. This proposal would not involve any significant effects and, therefore, does not represent an exception to the categorical exclusions.

July 20, 1981

Date Prepared

Environmental Scientist

I concur

JUL 23 1981

Date



FOR

E. W. GYNN
DISTRICT ENGINEER

District Supervisor

CATEGORICAL EXCLUSION REVIEW INFORMATION SOURCE

Criteria 516 DM 2.3.A	<u>Federal/State Agency</u>			Local and private correspondence (date)	Previous NEPA	Other studies and reports	Staff expertise	Onsite inspection (date)	Other
	Corre- spondence (date)	Phone check (date)	Meeting (date)						
1. Public health and safety					1, 2		6	6/17/81	
2. Unique charac- teristics					1, 2				
3. Environmentally controversial					1, 2				
4. Uncertain and unknown risks						4			
5. Establishes precedents					1, 2				
6. Cumulatively significant					1, 2		6		
7. National Register historic places	1-7/16/81								
8. Endangered/ threatened species	1-7/16/81								
9. Violate Federal, State, local, tribal law						4			3

Site-specific stipulations attached

COMMON REFERENCE LIST
NEPA Categorical Exclusion Review

1. SMA Input
2. Reviews, reports, or information received from Geological Survey (CD, GD, WRD, TD).
3. Lease Stipulations/Terms
4. Application to Drill
5. Operator correspondence
6. Field observation
7. Private Rehabilitation Agreement

Site-specific Stipulations

- 1) Rotate location 90° counter-clockwise to reduce cuts and fills and to place the reserve pit away from the Calf Canyon drainage.
- 2) Move the location 60' on an approximate bearing of $S60^{\circ}E$ from the original stake.
- 3) Alter reserve pit (8' x 20' x 100') to L-shape with the long edge paralleling the west edge of the wellpad.
- 4) Construct a diversion ditch on the west-northwest edge and draining to the south.



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Moab District
Grand Resource Area
P. O. Box M
Moab, Utah 84532

IN REPLY REFER TO

3109
U-38359
(U-068)

JUL 0 8 1981

Memorandum

To: Oil & Gas Office
USGS Conservation Division
P. O. Box 3768
Grand Junction, CO. 81501

From: Area Manager, Grand

Subject: Dyco Petroleum Corp. (APD)
Cisco Fed. # 3, Lease # U-38359
SE/NW Sec. 10, T. 20 S., R. 21 E., SLB&M
Grand County, Utah

On ~~May~~^{JUNE} 17, 1981 a representative from this office met with Glenn Doyle, USGS, and Newt Burkhalter, agent of the Dyco Petroleum Corporation for an inspection of the above referenced location. Subject to the attached conditions and written approval from USGS, I am approving the surface management portion of the Application for Permit to Drill.

The archaeological requirement has been fulfilled on this location. No threatened or endangered flora or fauna are indicated in the area.

Please forward the enclosed information to Dyco Petroleum Corporation.

Enclosures: (3)
1-Reclamation Procedures
2-Seed Mixture
3-Suggested Colors - Production Facilities

ACTING

STANDARD STIPULATIONS FOR OIL & GAS EXPLORATION

Contact this office at least 48 hours prior to beginning construction of access road and pad.

Stockpile the surface 12 inches of topsoil in a wind-row on the north west quadrant of the location.

The upper banks (uphill side) of all cuts will be rounded during construction of the access road and pad.

Notify the BLM District Archaeologist if cultural material from sub-surface deposits is exposed during the operation.

The trash cage will be at the location and fenced with fine mesh wire during drilling operations.

The "blooey" line will be centered and directed into the pit.

If production is obtained, the access road will be upgraded to BLM specifications for long-term roads as outlined in the surface use standards section of the "Oil and Gas" pamphlet (joint BLM, USGS and USFS publication).

If production is obtained, all production facilities will be painted. (See enclosed suggested colors - for facilities).

Rehabilitation of the site and access road will be accomplished in accordance with the enclosed restoration procedures.

Production facilities and pipeline route are approved on this location under lease rights.

As agreed upon at the Pre-drill field examination -

Access -

- 1) The access road from S $\frac{1}{2}$ SW $\frac{1}{4}$ Section 14 T. 20 S., R. 21 E., SLB&M, through W $\frac{1}{2}$ Section 14, NE $\frac{1}{4}$ /NE $\frac{1}{4}$ Section 15, northwesterly into the center of Section 10 will be covered by right-of-way # U-48446. Along this existing access road, it will be upgraded as needed, by low water crossings, the removal of one small ridge point on the east side of the road, and the pipeline that parallels the road for a distance on the west side will be avoided.
- 2) New access will be constructed from Texas Petroleum Corporation Gov't 3-1 producing well, in NW $\frac{1}{4}$ /SE $\frac{1}{4}$ Section 10, northwesterly for approximately 0.5 miles to the Dyco Petroleum Corp. Cisco Fed. # 3 in NW $\frac{1}{4}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$ Sec. 10. T. 20 S., R. 21 E., SLB&M.
- 3) Cross Calf Canyon immediately west of the Texas Petroleum well, and stay on the west side of Calf Canyon to the Dyco well.

- 4) Install a low water crossing at the Calf Canyon crossing, and in each drainage the new road crosses.
- 5) Any trees (pinon-juniper) removed from the road surface, and vegetation will be windrowed along the up-hill side of the road. Trees will be scattered back over restored road after seeding if well is a non-producer.
- 6) Road travel surface will be a maximum of 18 feet wide, with a total maximum disturbance of 24 feet.
- 7) If the well is a non-producer, the access road along west side of Calf Canyon will be recontoured by November 15, 1981, seeded in fall of 1981, and closed to all vehicle traffic.

Location -

- 1) Rotate rig layout 90 degrees counter clockwise to get the blooey pit away from Calf Canyon and in "cut" portion of the pad.
- 2) Move the well 60 feet south 60 degrees east to fit the topography of the location.
- 3) New access will be at the south east corner of the location.
- 4) Pit(s) will be constructed in an "L" shape with the long side of the L along the outer edge of the pad. The long part of the L will be 100 feet long x 20 feet wide x 8 feet deep. The short part will be 25 feet long x 20 feet wide x 8 feet deep.
- 5) Pit(s) dikes along the edge of the pad will be 1.5 feet to 2.0 feet higher than the level of the pad, constructed in 8 inch soil lifts, and machinery compacted. Dikes will be wide enough at the top for machinery to pass over.
- 6) Pit(s) will be fenced on 3 sides with 5 strands of barbed wire prior to drilling, and on the 4th side prior to rig removal.
- 7) Pad will have dikes constructed along the west side to divert any over land water flow to the south and into Calf Canyon.
- 8) If oil is produced and tanks are used for storage, (see exhibit I) loading pipes and oil sump will be inside the 4 foot high berm around the tanks.
- 9) If production is gained, the non-producing area (from approximately 15 feet outside the deadmen or anchors to the outside of the disturbed area will be contoured and seeded. If dry the whole pad area will be treated as above. Re-contouring will be done by November 15, 1981, seeded in the fall of 1981, pad will be closed to all surface traffic.

RECLAMATION PROCEDURES IN GRAND RESOURCE AREA

1. Disk or rip pads and access roads.
 - a. Overlap passes in order to insure complete treatment.
2. Contour pads and access roads.
 - a. Lay berms into centers.
 - b. Use cut material for fill areas.
 - c. Lay stockpiled surface soil over top of pads and spread evenly.
 - d. On highly erosive soils, it may be more beneficial to grade slopes to reduce steepness.
 - e. Do not smooth pads out, leave a roughened surface. On steeper slopes and slopes with clayey soils scarify or serrate the ground in order to increase water infiltration and reduce erosion.
3. Water bar roads where required by this office.

*	2 percent	Grade	-	200 ft. intervals
	2-4 percent	Grade	-	100 ft. intervals
	4-5 percent	Grade	-	75 ft. intervals
	5 percent	Grade	-	50 ft. intervals

* Actual spacing may vary according to soil stability. Lighter textured soils will require more frequent water bars. When natural drainage ways are present, water bars are to be constructed to make maximum use of them. Plan operations so that natural drainage ways do not become blocked.
4. Seed roads and pads in the fall (Oct. through mid-Dec.).

SEED MIXTURE

<u>Species</u>		<u>Rate</u>
<u>Grasses</u>		<u>lbs/acre</u>
Oryzopsis hymenoides	Indian rice grass	1
Hilaria jamesii	Curley grass	1
<u>Forbs</u>		
Sphaeralcea coccinea	Globemallow	1
<u>Shrubs</u>		
Atriplex confertifolia	Shadscale	<u>1</u>
Total		5



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

SUGGESTED COLORS TO PAINT OIL & GAS PRODUCTION FACILITIES

Cisco Desert and Flats below the Bookcliffs:

Dynasty Green	(Sears)
Tumbleweed	(Pratt & Lambert)
Desert Tan	-----
Sage Gray	(Pratt & Lambert)

Bookcliffs Region:

Sage Gray	(Pratt & Lambert)
Sea Life	(Pratt & Lambert)
Dynasty Green	(Sears)

Similar hues other than the ones mentioned above must be approved by the Grand Resource Area Manager.

FROM : DISTRICT GEOLOGIST ME, SALT LAKE CITY, UTAH

TO : DISTRICT ENGINEER, O&G, SALT LAKE CITY, UTAH

SUBJECT: APD MINERAL EVALUATION REPORT

LEASE NO. U-38359OPERATOR: Dyco PetroleumWELL NO. 3LOCATION: C 1/2 SE 1/4 NW 1/4 sec. 10, T. 20S, R. 21E, SLMGrand County, Utah

1. Stratigraphy:

Mancos	surface
Dakota	2765'
Morrison	2905'
Salt Wash	3135'
Summerville	3380'
Entrada	3470'
TD	3520'

2. Fresh Water:

Fresh water may be present in Mancos sandstones to ~500' depth.

3. Leasable Minerals:

Coal: Dakota. Thin, lenticular beds.

Oil/Gas: Dakota to TD

Geothermal: within the Cisco Dome KGRA (geothermal)

4. Additional Logs Needed: Adequate5. Potential Geologic Hazards: None expected

6. References and Remarks:

Signature: Gregory W WoodDate: 6 - 12 - 81

